



Docket No.: 04577/0200726-US0
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Xiaobing Wu et al.

Application No.: 10/750,620

Confirmation No.:

Filed: December 30, 2003

Art Unit: N/A

For: METHOD TO PREVENT TRANSPLANT
REJECTION BY STABLE EXPRESSION OF
HEME OXYGENASE-1

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

A copy of each document on the PTO/SB/08 is attached.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: September 17, 2004

Respectfully submitted,

ow

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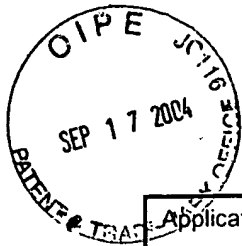
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Application No. (if known): 10/750,620

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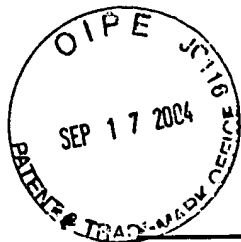
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Information Disclosure Statement (2 pages)
PTO/SB/08 (3 pages) and Thirty two (32) documents



PTO/SB/08a/b (08-03)

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				First Named Inventor	Xiaobing Wu
				Art Unit	N/A
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Sheet	1	of	3	Attorney Docket Number	04577/0200726-USO

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS						
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1.	Pascual M, et al., <i>Strategies To Improve Long-Term Outcomes After Renal Transplantation</i> . N Engl J Med. (2002) 346, 580-90.	
	2.	Tilney NL, et al., <i>Chronic Rejection</i> . Transplant Proc (1998) 30, 1590-1594.	
	3.	Libby P and Pober JS, <i>Chronic Rejection</i> . Immunity (2001) 14, 387-397.	
	4.	Schuller DJ, et al., <i>Crystal Structure Of Human Heme Oxygenase-1</i> . Nat. Structural Biology (1999) 6, 860-867.	
	5.	Maines MD, <i>The Heme Oxygenase System: A Regulator Of Second Messenger Gases</i> . Annu. Rev. Pharmacol. Toxicol. (1997) 37, 517-554.	
	6.	Otterbein LE, et al., <i>Carbon Monoxide Has Anti-Inflammatory Effects Involving The Mitogen-Activated Protein Kinase Pathway</i> . Nat. Med. (2000) 6, 422-428.	
	7.	Minamino T, et al., <i>Targeted Expression Of Heme Oxygenase-1 Prevents The Pulmonary Inflammatory And Vascular Responses To Hypoxia</i> . Proc. Natl. Acad. Sci. USA (2001) 98, 8798-8803.	
	8.	Amersi F, et al., <i>Upregulation Of Heme Oxygenase-1 Protects Genetically Fat Zucker Rat Livers From Ischemia/Reperfusion Injury</i> . J. Clin. Invest. (1999) 104, 1631-1639.	
	9.	Yet SF, et al., <i>Cardiac-Specific Expression Of Heme Oxygenase-1 Protects Against Ischemia</i>	

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Sheet	2	of	3	Attorney Docket Number	04577/0200726-USO

		<i>And Reperfusion Injury In Transgenic Mice. Circ. Res. (2001) 89, 168-173.</i>	
	10.	Soares MP, et al., <i>Expression Of Heme Oxygenase-1 Can Determine Cardiac Xenograft Survival. Nat. Med. (1998) 4, 1073-1077.</i>	
	11.	Debruyne LA, et al., <i>Gene Transfer Of Immunomodulatory Peptides Correlates With Heme Oxygenase-1 Induction And Enhanced Allograft Survival. Transplantation (2000) 69, 120-128.</i>	
	12.	Hancock WW, et al., <i>Antibody-Induced Transplant Arteriosclerosis Is Prevented By Graft Expression Of Anti-Oxidant And Anti-Apoptotic Genes. Nat. Med. (1998) 4, 1392-1396.</i>	
	13.	Zhijian WU, et al., <i>Generation Of A Recombinant Herpes Simplex Virus Which Can Provide Packaging Function For Recombinant Adeno-Associated Virus. Chinese Science Bulletin (1999) 44, 715-718.</i>	
	14.	Xiobing WU, et al., <i>A Novel Method For Purification Of Recombinant Adeno-Associated Virus Vectors On A Large Scale. Chinese Science Bulletin (2001) 46, 484-489.</i>	
	15.	Samulski RJ, et al., <i>Helper-Free Stocks Of Recombinant Adeno-Associated Viruses: Normal Integration Does Not Require Viral Gene Expression. J. Virol. (1989) 63, 3822-3828.</i>	
	16.	Demetris AJ, et al., <i>Analysis of Chronic Rejection and Obliterative Arteriopathy Am. J. Pathol. (1997) 150, 563-578.</i>	
	17.	Border WA and Nobel NA, <i>Transforming Growth Factor-β In Tissue Fibrosis. N. Engl. J. Med. (1994) 331, 1286-1292.</i>	
	18.	Kaplitt MG, et al., <i>Long-Term Gene Expression And Phenotypic Correction Using Adeno Associated Virus Vectors In The Mammalian Brain. Nat. Genet. (1994) 8, 148-154.</i>	
	19.	Owens RA, et al., <i>Second Generation Adeno-Associated Virus Type 2-Based Gene Therapy Systems With The Potential For Preferential Integration Into AAVS1. Curr. Gene Ther. (2002) 2, 145-159</i>	
	20.	Brouard S, et al., <i>Carbon Monoxide Generated By Heme Oxygenase 1 Suppresses Endothelial Cell Apoptosis. J. Exp. Med. (2000) 192, 1015-1025.</i>	
	21.	Lee TS and Chau LY, <i>Heme Oxygenase-1 Mediated The Anti-Inflammatory Effect Of Interleukin-10 In Mice. Nat. Med. (2002) 8, 240-246.</i>	
	22.	Duckers HJ, et al., <i>Heme Oxygenase-1 Protects Against Vascular Constriction and Proliferation. Nature Medicine (2001) 7, 693-698.</i>	
	23.	Peyton KJ, et al., <i>Heme Oxygenase-1 Derived Carbon Monoxide Is An Autocrine Inhibitor Of Vascular Smooth Muscle Cell Growth. Blood (2002) 99, 4443-4448.</i>	

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	24.	Tulis DA, et al., <i>Adenovirus-Mediated Heme Oxygenase-1 Gene Delivery Inhibits Injury-Induced Vascular Neointima Formation</i> . Circulation (2001) 104, 2710-2715.	
	25.	Liu X, et al., <i>Adenovirus-Mediated Heme Oxygenase-1 Gene Expression Stimulates Apoptosis In Vascular Smooth Muscle Cells</i> . Circulation (2002) 105, 79-84.	
	26.	Waltenberger J, et al., <i>Induction Of Transforming Growth Factor-β During Cardiac Allograft Rejection</i> . J. Immunol. (1993) 151, 1147-1157.	
	27.	Little DM, et al., <i>Does Transforming Growth Factor β 1 Play A Role In The Pathogenesis Of Chronic Allograft Rejection?</i> Transpl. Int. (1999) 12, 393-401.	
	28.	Pascual M, et al., <i>Chronic Rejection And Chronic Cyclosporin Toxicity In Renal Allografts</i> . Immunol. Today (1998) 19, 514-519.	
	29.	Fujita T, et al., <i>Paradoxical Rescue From Ischemic Lung Injury By Inhaled Carbon Monoxide Driven By Derepression Of Fibrinolysis</i> . Nat. Med. (2001) 7, 598-604	
	30.	Shibahara S, et al., <i>Cloning And Expression Of cDNA For Rat Heme Oxygenase</i> . Proc. Natl. Acad. Sci. USA (1985) 82:7865-7869.	
	31.	Ono K and Lindsay ES, <i>Improved Technique Of Heart Transplantation In Rats</i> . J. Thorac. Cardiovasc. Surg. (1969) 57:225.	
	32.	Tsui TY, et al., <i>Prevention Of Chronic Deterioration Of Heart Allograft By Recombinant Adeno-Associated Virus-Mediated Heme Oxygenase-1 Gene Transfer</i> . Circulation (2002) 2623-2629.	

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